

South Carolina Department of Health and Environmental Control

Regulation 89-10 through 89-350

Office of the Governor Mining Council of South Carolina ("S.C. Mining Regulation")

Effective Date: June 27, 2003

Bureau of Land & Waste Management
Division of Mining & Solid Waste Management
2600 Bull Street
Columbia, SC 29201

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Note:

- < South Carolina state government was restructured pursuant to S.C. Code Section 1-30-10, et seq. This restructuring became effective on July 1, 1994, and provided, in part, the following changes in state agencies:
 - \$ The S.C. Land Resources Conservation Commission was dissolved and the Mining and Reclamation Division was relocated under the Bureau of Land and Waste Management within the S.C. Department of Health and Environmental Control;
 - \$ The State Water Resources Commission no longer exists as a state agency;
 - \$ The Wildlife and Marine Resources Department was reorganized into the S.C. Department of Natural Resources:
 - \$ The Coastal Council's name changed to the Office of Ocean and Coastal Resources Management (OCRM) and was relocated under the S.C. Department of Health and Environmental Control; and,
 - \$ Department of Highways and Public Transportation's name was changed to S.C. Department of Transportation

The last comprehensive amendment to Regulations 89-10 through 89-350 was done in 1992. Therefore, there are references to agencies/divisions that either no longer exist, or were reorganized and renamed pursuant to the restructuring in 1994. In the copies of Regulations 89-10 through 89-350 provided by the Department of Health and Environmental Control, footnotes have been added throughout the text to note the correct agency name as appropriate. A future proposed amendment to the regulations will address these changes.

< Pursuant to the direction of the South Carolina Legislative Council, the chapter heading for this chapter was changed from "South Carolina Mining Council" to "Office of the Governor - Mining Council of South Carolina" in 1997.</p>

EFFECTIVE: June 27, 2003

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

CHAPTER 89

Statutory Authority: 1976 Code Section 48-20-10, and 48-20-210

R.89-10 through 89-350 Office of the Governor - Mining Council of South Carolina

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- **89-10. Definitions.** Terms which have been defined in the Act shall have the same definitions when utilized in these Regulations. Additional definitions are as follows:
- A. "Temporary overburden" means overburden which will be moved back into the mine or which will otherwise be disposed of in reclaiming the mined areas.
- B. "Permanent overburden" means overburden that will be moved directly from the source to its planned final location.
- C. "Best Management Practices" (erosion and sediment control) means a practice or combination of practices that are determined by the Department to be an effective and practicable means of controlling nonpoint pollutants, particularly a practice or combination of practices that are determined to be an effective and practicable means of erosion and sediment control. Acceptable practices may include, but not be limited to: check dams, diversions, filter berms, drop structures, dust suppressants, mulching, riprap, sediment basins, sediment traps, engineered stream crossings, and vegetation.
- D. "Topsoil" means the surface layer and/or its underlying materials that have properties capable of producing desirable reclamation and vegetation.
- **89-20.** Activities Requiring Permits. No operator shall engage in mining without having first obtained from the Department an operating permit which covers the affected land provided that no permit shall be required for those activities specifically exempted by the Act. An operating permit shall be required if the affected land for an exploratory excavation involving the development of open pits, trenches, open cuts or tunneling is to exceed two acres. An operating permit will not be required to remove minerals stockpiled prior to July 1, 1974, or if the affected land for an exploratory excavation is to be less than two acres as long

as no minerals from such exploratory activity are sold, processed for sale, or consumed in the regular operation of business. A Certificate of Exploration shall be required for exploratory excavations involving the development of open pits, trenches, open cuts or tunneling, and which will affect an area two acres or less. A Certificate of Exploration is not required for core drilling or sample drilling or conducting geophysical and geochemical sampling and analysis.

- **89-30.** Exemption from Operating Permit. An operating permit shall not be required for excavation or grading conducted solely in aid of on-site farming or on-site construction. This shall include grading, backfilling, plowing or excavating areas for agriculture, aquaculture, silviculture or on-site construction. In the event the Department is uncertain as to the specific use of material resulting from on-site farming or on-site construction, a letter of intent may be required prior to granting an exemption from an operating permit. Exemptions granted by the Department may include references to other required plans or permits including, but not limited to, local land use permits, grading permits, erosion and sediment control plans or conservation plans.
- **89-40. Development of Administrative Forms.** The development of all administrative forms necessary to comply with the South Carolina Mining Act and as referenced in these regulations shall be initiated by the Department. Development of all forms by the Department shall include advice and input by interested parties and shall include a 30 day period of review prior to adoption for official use. In the event the content of the forms is not satisfactory to the interested parties, the forms shall be submitted to the South Carolina Mining Council for declaratory ruling.

89-50. Application Requirements for a Certificate of Exploration.

- A. Section 48-20-50 of the Act states that an explorer engaging in exploration activities regulated pursuant to the Section shall make written application to the Department on forms furnished by the Department. A completed application shall consist of:
 - (1) One copy of Form MR-200 entitled "Application for a Certificate of Exploration".
 - (2) One copy of Form MR-300 entitled "Reclamation Plan for Exploration".
- B. The "Application for a Certificate of Exploration" and the "Reclamation Plan for Exploration" shall be completed in typewritten or hand-printed form as part of the completed application.

89-60. Application Requirements for an Operating Permit.

- A. Section 48-20-70 of the Act states that any operator desiring to engage in mining shall make written application to the Department on the forms furnished by the Department. A completed application shall consist of:
 - (1) One copy of the form entitled "Application for a Mining Permit".
 - (2) Two copies of the form entitled "Reclamation Plan".
- (3) One copy of the form entitled "Land Entry Agreement-Owner" (MR-600) (if the mine operator owns the land) or one copy of the form entitled "Land Entry Agreement-Lessor/Lessee" (MR-700) (if the mine operator leases the land).
- (4) One copy of a letter from an attorney attesting to the ownership of the property, ownership of mineral rights and that the operator has acquired rights to mine the property.

- B. Supplemental information may be required as part of the operator's application or after the Department reviews the operator's application for permit. When supplemental information is required, the Department shall state in writing to the applicant the information required and the reason or reasons for requesting such supplemental information. All supplemental information shall be submitted in typewritten or hand printed form to the Department.
- **89-70. Application for a Mining Permit.** Form MR-400 entitled "Application for a Mining Permit", shall be completed in typewritten or hand printed form as part of the completed application.

89-80. Reclamation Plan.

- A. The basic objective of the reclamation plan shall be to establish, on a continuing basis, a vegetative cover, soil stability, and water and safety conditions appropriate to the area.
- B. Reclamation shall be conducted simultaneously with mining whenever feasible and in any event shall be initiated at the earliest practicable time, but no later than within 180 days following termination of mining on any segment of the mine and shall be completed within two years after completion or termination of mining on any segment of the mine.
- C. The reclamation plan, shall, to the extent applicable, include:
 - (1) The planned land use or uses to which the affected lands will be rehabilitated;
- (2) The specifications for surface gradient restoration, including sketches delineating slope angle, to a surface suitable for the proposed subsequent use of the land after reclamation is completed, and the proposed method of accomplishment;
- (3) The methods to prevent or eliminate conditions that will be hazardous to animal or fish life in or adjacent to the affected land;
 - (4) The methods for rehabilitating settling ponds;
- (5) The method for restoring or establishing stream channels and stream banks to a condition which will minimize erosion and siltation;
 - (6) The method for the control of contaminants and disposal of the refuse including tailings;
 - (7) The measures to provide safety to persons and adjoining property in all excavations;
- (8) The measures to prevent the collection and retention of small pools of water that are likely to become noxious, odious, or foul;
- (9) A plan for the permanent revegetation, reforestation or other surface treatment of the affected land using accepted and recommended agronomic and reforestation practices of the South Carolina Agricultural Experiment Station of Clemson University and the South Carolina Commission of Forestry or the State Soil and Water Conservation Districts. The revegetation plan shall include but not be limited to the following:
 - (a) Planned soil tests;
 - (b) Site preparation and fertilization;

- (c) Seed or plant selection;
- (d) Rate of seeding or amount of planting per acre;
- (e) Maintenance.
- (10) A plan for the maintenance of any revegetated or reforested area through the second growing season or until such time as the reclaimed area shall be released from bond;
- (11) A time schedule of reclamation activities, particularly those relating to Best Management Practices for sediment and erosion control, which shall be keyed to the maps required by these regulations;
- (12) Two copies of a map which shall be of the same scale, quality and legibility as the map submitted with the mining permit application under these Regulations and which shall show, to the extent applicable, the following:
- (a) The outline of the proposed final limits of the excavation, during the number of years for which the permit is requested;
- (b) The approximate location of final cut or fill slopes not part of the general surface gradient of the area to be reclaimed;
 - (c) The outline of the tailings disposal area;
 - (d) The outline of disposal areas for spoil and refuse (exclusive of tailings ponds);
- (e) The approximate location of the mean shore line of any impoundment or water body which will remain upon final reclamation;
- (f) The approximate locations of access roads, haul roads, or ramps which will remain upon final reclamation;
 - (g) The approximate location of various vegetative treatments;
 - (h) The proposed locations of re-established streams or ditches to provide for drainage;
- (i) The proposed locations of diversions, terraces, or other Best Management Practices to be used for preventing or controlling erosion and off-site siltation;
 - (j) The proposed locations of the measures to provide safety to persons and adjoining property;
- (k) A legend showing the name of the applicant, the name of the proposed mine, the north arrow, the county, the scale, the date of preparation and the name and title of the person who prepared the map;
 - (l) The boundaries of the permitted area;
 - (m) The boundaries of the affected area for the anticipated life of the mine.
 - (n) The boundaries of the 100-year floodplain, where appropriate.

- D. The Department shall be authorized to approve a reclamation plan despite the fact that such plan does not provide for reclamation treatment of every portion of the affected land, where the Department finds that because of special conditions such treatment would not be feasible for particular areas and that the plan takes all practical steps to minimize the extent of such areas.
- E. Form MR-500, entitled "Reclamation Plan", shall be completed in typewritten or hand printed form as part of the completed application.

89-90. Land Entry Agreement.

- A. Form MR-600, entitled "Land Entry Agreement for Land Owned by Mine Operator", shall be completed in typewritten or hand printed form as part of the completed application; or
- B. Form MR-700, entitled "Land Entry Agreement for Land Leased by Mine Operator", shall be completed in typewritten or hand printed form as part of the completed application. Lessor's consent will not be required for leases executed prior to July 18, 1980.

89-100. Advertising and Notice of An Applicant's Intent to Mine or Substantial Modification of a Permit.

- A. The applicant for a permit shall provide the most recent county tax map(s) and names and addresses of the owners of real property, as they appear on the county tax maps, as contiguous to the proposed mine permit area. The Department shall send a notification to contiguous landowners of the application by regular mail.
- B. Any notice of an applicant's intent to mine or of a substantial modification of a permit which may be required by law shall be advertised in a newspaper of general circulation in the area of the proposed mine. The advertisement will appear once a week for two consecutive weeks. The Department shall be responsible for the cost of advertising.
- C. The advertisement must be at least two column inches long and state the name of the applicant, the location of the proposed mine, the county, the city, town or community nearest to the proposed mine, the primary mineral(s) to be mined, proposed land use(s) following reclamation and the last date of the public comment period.
- D. Advertising will be considered complete when the Department receives affidavit(s) of publication.

89-110. Public Hearings Upon Request Following Advertisement of Intent to Mine or Substantial Modification of a Permit.

- A. A public hearing will be held by the Department, following the last required date of advertisement of any application for a permit or any substantial modification, when requested in writing by ten persons or by a governmental subdivision or agency or by an association having not less than ten members. A request for a public hearing must also be based on sufficient technical reasons. The Department shall send a notice acknowledging receipt of a petition for a public hearing to the applicant and to the petitioners within fifteen (15) calendar days following receipt of the petition.
- B. Public hearings held pursuant to this Section shall be for the purpose of receiving data, views, comments or arguments from all interested parties concerning any application for a permit to mine or substantial modification of an existing permit. A public hearing is not an adjudicatory hearing pursuant to the Administrative Procedures Act.

- C. Requests for a public hearing are considered to have been made when received by the Department within fifteen (15) calendar days from the date of last required advertisement.
- D. When a public hearing has been scheduled by the Department, public notice of the hearing shall be given at least thirty (30) calendar days prior to the date on which the public hearing will be held.
 - (1) The public notice shall contain all of the following information:
 - (a) The date of the notice;
 - (b) The Department's name, address, and telephone number;
 - (c) A statement of the date, time, and location of the public hearing;
- (d) A statement that the Department will hold a public hearing to receive written and oral comments on a proposed application or modification; and
 - (e) A short statement describing the nature of the application or modification; and
 - (f) A statement indicating the final date for receipt of written comments.
 - (2) Public notice shall be accomplished by all of the following:
- (a) Advertising the notice once a week for two consecutive weeks in a newspaper of general circulation in the area of the proposed mine;
 - (b) Mailing a copy of the notice to the applicant for a mining permit;
 - (c) Mailing a copy of the notice to the person(s) petitioning the Department; and
- (d) Mailing a copy of the notice to Soil and Water Conservation District commissioners in the County where the mine is or is to be located.
- E. Public hearings may be recorded and/or transcribed by the Department or by a certified Court Reporter retained for the hearing.

89-120. Terms and Conditions of Permit.

- A. The terms and conditions of the permit shall be as set forth in the approved Application for a Mining Permit and the approved Reclamation Plan.
- B. The Department may impose terms and conditions on the applicant's or operator's permit provided:
 - (1) There is a basis in law for the provision of such terms and conditions; and
 - (2) The Department shall have reviewed the mining and reclamation plans of applicant or operator; and
 - (3) Inspected the lands permitted or to be permitted; and
- (4) Determined that applicant's or operator's plans are inadequate for public safety and to properly protect and safeguard the land, water, air and environment of adjacent non-permitted lands; and

- (5) The Department shall notify the applicant or operator in writing of the terms and conditions imposed and the reasons for such additional terms and conditions.
- C. Such imposed terms and conditions may include and cover, but are not limited to the following:
- (1) Best Management Practices for Sediment and Erosion Control: Appropriate Best Management Practices for sediment and erosion control shall be designed, constructed, and maintained to prevent additional contribution of sediment to streams, lakes or ponds or land outside the permit area. Where applicable, sediment and erosion control measures to prevent degradation of the environment shall consist of the utilization of proper reclamation methods and sediment control practices including, but not limited to:
 - (a) Grading the backfill material to reduce the rate and volume of runoff;
 - (b) Retaining sediment within the pit and disturbed area;
- (c) Establishing temporary vegetation or mulch on areas that will remain subject to erosion for as long as six months.
- (2) Visual Screening Measures: The Department may require visual screening, vegetative or otherwise, so as to screen the view of the operation from public highways, public parks, or residential areas, where the Department finds such screening to be feasible and desirable.

(3) Dewatering Measures:

- (a) In areas of documented groundwater-related impacts from dewatering activities or potential significant impact as determined by the Department, the Department may require the operator to install a groundwater monitoring system to evaluate pre-mining groundwater conditions.
- (b) In areas of documented groundwater related problems or potential significant impact as determined by the Department, the operator may be required to keep accurate records of the time and rate of groundwater pumping, groundwater elevations in the pit or groundwater elevations in observation wells during mining.
- (c) Information collected from a pre-mine groundwater monitoring system and during mining will be used by the operator and Department to determine provisions which meet the requirements for the protection and/or restoration of surface water or groundwater impacted by mine dewatering.

(4) Cultural and Historic Sites:

- (a) In areas of significant cultural and historic sites, the Department may require a survey of cultural and/or historic resources on the proposed mine site by a consultant or other qualified person retained by the operator.
- (b) Information obtained from the survey will be used by the operator and Department to determine provisions which meet the requirements for the protection, relocation, or excavation of significant cultural or historic sites as mining progresses.
 - (5) Operators Mining in Rivers and Streams:
 - (a) A minimum fifty-foot border of natural vegetation between the water's edge and any plant site on

the permitted area shall be left undisturbed subject to the operator's right to normal access to the stream. When the materials extracted are not processed after removal and no plant is located on the property, the operator shall take all necessary precautions to preserve the integrity of the stream bank.

- (b) The S. C. Department of Highways and Public Transportation¹ and/or the S. C. Public Service Commission may be contacted in reference to setback requirements from bridges, railroad trestles and other structures for in-stream mining activity.
- (c) Where appropriate, Best Management Practices, such as sediment traps and sediment fences shall be installed and maintained to minimize the amount of sediment and spoil returning to the stream.
- (d) Where appropriate, the Department may require that all facilities such as dredges, pumps and floating pipelines which are placed in any stream or other body of water navigable by boats and water recreational vehicles be identified by flags, signs and lights.
- (e) Sediments, spoil or screening shall not be placed so as to build up the water surface or near enough to the water surface to interfere with normal flow of the stream or traffic by boat or recreational vehicles.
 - (6) Noise Monitoring and Control.
- (a) On initial applications or permits having substantial modifications where the Department determines that a mining operation may significantly increase noise levels on neighboring property, the operator may be required to conduct monitoring to determine background noise levels.
- (b) Information collected from the noise monitoring will be used by the operator and Department to determine provisions to minimize noise levels to neighboring landowners.
- D. The applicant may voluntarily agree to place terms and conditions on the permit. Such voluntary terms and conditions become binding and fully enforceable. Such voluntary terms and conditions do not (1) become binding on any other permit, (2) establish any precedent, (3) establish any standard procedure or standard practices or (4) have any application outside the permit.

89-130. Operating Permit Survey Control Points

- A. The operator shall be required to clearly mark the boundary of the permitted area prior to initiating mining. Boundary markers shall be maintained throughout the life of the mine. The operator shall also install and maintain two (2) permanent survey monuments or control points within the permitted area at least 100 feet apart.
- B. As determined to be necessary, the Department may require the operator to place control markers at the boundary of the area to be affected under the operating permit.

89-140. Minimum Standards for Environmental Protection and Land Reclamation

A. In all excavation of rock, provisions for safety to persons and to adjoining property must be provided including, but not limited to the following requirements:

¹ The Department of Highways and Public Transportation=s name was changed to the S.C. Department of Transportation

- (1) Fencing may be required at any excavation in rock which exceeds twenty feet in depth. Fencing along "natural barriers" such as swamps, rivers, and salt marsh may not be required. Fencing along sides of quarries on natural slopes or where no highwall is present may be required to discourage access to the base of highwalls present in other parts of the quarry. Cultural or other barriers including, but not limited to, rock barricades, elevated roadways, railroads and building facades may be accepted by the Department.
- (2) The type of fence required by the Department depends primarily on the location of the excavation. The types of fences which may be required by the Department are woven wire, barbed wire, chain link, or combination of the three. Woven and barbed wire fences are generally suitable for rural areas with no adjacent development. Chain link fences are suitable generally for urbanized or heavily developed areas. If the area adjacent to an excavation becomes urbanized after a fence suitable for a more remote location has been installed and accepted, upgrading of the fence may be required.
- (3) Woven wire fence fabric shall be at least thirty-nine inches in width. Woven wire fences shall be topped with two strands of two-point, twelve and one-half gauge or heavier barbed wire having barbs not over five inches apart. Thirty-nine inch woven wire shall have nine lines with six inch spacing on stay wires. Barbed wire fences shall have at least five equally spaced strands of four-point barbed wire, twelve and one-half gauge or heavier with barbs not more than five inches apart. The top strand must be forty-five inches above the ground. Chain link fence fabric shall be not less than sixty inches in width. Forty-eight inch chain link fences may be substituted for woven wire or barbed wire fences. Chain link fences must be eleven and one-half gauge and have a tension wire or rails at the top and bottom. Higher chain link fences or chain link fences topped with three or four strands of four-point, twelve and one-half gauge or heavier barbed wire, with barbs not over five inches apart, may be required in certain cases. The bottom strand of the fence shall not come in contact with the ground and there must be no excessive openings between the ground and the bottom of the fence. Opening under fences, caused by crossing ditches or small ground depressions where it is not practical for the fencing to follow closely the contour of the ground, must be fenced or otherwise closed.
- B. All overburden and spoil shall be placed so as not to result in deposits of sediment in streams, lakes, or on adjacent property. Also, it shall not be placed in such a way as to interfere with proper drainage. If the Department finds environmental degradation or degradation of the scenic values in the non-permitted area resulting from sedimentation or water pollution, then the Department may require corrective measures including, but not limited to:
- (1) Runoff from the temporary overburden piles will be diverted into the mining operation, pits, sediment basins or otherwise prevented from leaving the site until adequate settlement or filtration has been accomplished.
- (2) Temporary overburden piles shall not be placed in or infringe on natural drainageways or floodways, unless proper designs are utilized.
- (3) Temporary overburden piles in public view shall be vegetated as rapidly as the placement operations permit.
- (4) Each segment of permanent overburden shall be shaped and vegetated (where appropriate) as rapidly as placement progresses.
- (5) The shape of the permanent overburden material will blend in with the natural landscape and in accordance with the Reclamation Plan.
 - (6) Temporary or permanent Best Management Practices for erosion control shall be used as needed to

prevent sediment from leaving the site.

- (7) Permanent overburden piles shall be placed in a manner consistent with land use and in a manner which will not interfere with natural drainage, drainageways, or floodways.
- C. Topsoil, sufficient to satisfy reclamation requirements, shall be removed and stored in such a manner as to remain available for reclamation and shall not be carried away or covered up with other materials. Topsoil which has been saved for future reclamation shall not be removed from the affected area unless authorized by the Department.
- D. During the mining operation and reclamation work, care must be taken to prevent any excessive drainage or accumulation or release of excess water that may damage the adjoining property of other owners.

89-150. Surface Blasting Requirements.

A. Pre-Blast Survey

- (1) Prior to initial blasting activities or significant modification of a permit which expects to use blasting, the operator shall be responsible for a pre-blast survey of inhabited structures (commercial buildings, homes, churches, barns) that are within one-half mile of any blasting to be conducted by the operator. The survey may exclude structures that the operator owns or has a waiver of damage.
- (2) The operator shall submit to the Department the names and addresses of the owners of inhabited structures within the one-half mile. The Department will notify, in writing, the appropriate structure owner informing them of their right to have their structures inspected at no cost to the structure owner. Based on the response from the owner, the Department will notify the operator as to which structures are to be inspected.
- (3) The survey shall be conducted by a consultant or other qualified person retained by the operator and approved by the Department. The consultant or other qualified person shall inspect each designated structure to determine the base line condition of that structure before blasting is initiated.
- (4) The owner shall have the right to be present during the survey of his structure. A written report of the inspection shall be submitted to the Department, owner of the structure and to the operator.
- B. The operator shall keep accurate records of the use of explosives including, but not limited to, spacing, depth, and pattern of holes, pounds of explosive per delay, total pounds of explosive used per event, and the date and time of the blasts. These records shall be retained for at least three years.
- C. When the Department finds it necessary to monitor a blast in an investigation of a written complaint, the operator upon written request from the Department shall give the Department forty-eight hours notice before blasting, such request to become effective forty-eight hours after receipt of the written request.
- D. Access into the blasting area shall be controlled by the operator to protect the public and livestock from physical effects of flyrock.
- E. In all blasting operations the maximum peak particle velocity measured in any three mutually perpendicular directions shall not exceed one inch per second at the immediate location of any dwelling, public building, school, church, or commercial or institutional building. The maximum peak particle velocity requirement does not apply to structures within the permitted area, or any area that is owned or leased by the operator. Leased as used above shall include structures on which the operator has acquired waiver to damage rights.

- F. An equation for determining the maximum weight of explosives that can be detonated within any 8-millisecond period is contained in the following paragraph. If the blasting is conducted in accordance with this equation, the maximum peak particle velocity shall be deemed to be within the 1-inch per second limit.
- G. The maximum weight of explosives to be detonated within any 8-millisecond period may be determined by the formula $W = (D/60)^2$ where W = the maximum weight of the explosive, in pounds, and D = the distance, in feet, from the blast to the nearest dwelling, school, church, or commercial or institutional building.
- H. On applications for new areas dated subsequent to the date of these regulations, the operator shall maintain a minimum distance of two hundred fifty (250) feet from contiguous property boundaries when conducting blasting.
- I. To provide for adequate public safety, the operator shall be required to maintain a minimum distance between the nearest point of blasting and any structures not owned by the operator as of the completed application date or where there is no waiver of damage. The minimum distance shall be established by the Department after considering the method of mining, site conditions, proposed directions of blasting, type and use of neighboring structures, previous blasting record, and/or other factors as deemed appropriate by the Department.
- J. The operator shall notify the Department within twenty-four (24) hours following the observation or discovery of flyrock outside of the permitted area that resulted from blasting operations at a mine. Based on the flyrock incident, the Department may require the operator to submit a written report outlining the cause of the excessive flyrock and a plan to adequately control flyrock. Any report and plan submitted by the operator must be reviewed by the Department prior to conducting additional blasting.
- **89-160.** Requirements for Substitution of Land to be Reclaimed. An operator shall have the right to substitute and reclaim an area mined in the past for an area presently being mined, the substitution being subject to approval by the Department. Such substitutions may be made on an acre-for-acre basis if the estimated cost of reclamation is comparable. Other ratios may be agreed upon depending on the relative ease of reclamation or upon the value or desirability of reclaiming such substituted land.

89-170. Departmental Procedure for Granting a Permit.

- A. When the Department receives the Application for a Mining Permit, it shall advertise the applicant's intent to mine.
- B. The Department may refer copies of the Application for a Mining Permit to the State Water Resources Commission, Department of Health and Environmental Control, Wildlife and Marine Resources Department, Coastal Council, Department of Archives and History, Institute of Archeology and

² State Water Resources Commission no longer exists as a state agency.

³ Wildlife and Marine Resources Department was reorganized into the S.C. Department of Natural Resources.

⁴ Coastal Council=s name changed to Office of Ocean and Coastal Resources Management (OCRM) and was relocated under the S.C. Department of Health and Environmental Control.

Anthropology, Department of Highways and Public Transportation,⁵ appropriate County Council or County Administrator's office, appropriate town or municipal government office or other state or local agencies for review and comment. The Department may request the assistance of other state agencies or local agencies in evaluating the application and the reclamation plan or in developing the terms and conditions.

- C. Within sixty days from the time the completed application for a permit is filed, the Department shall approve, approve with stated modifications, or disapprove the application.
- D. Upon approval of the application, the Department shall:
 - (1) Set the amount of bond required;
 - (2) Notify the applicant in writing of:
 - (a) The date of approval;
 - (b) The amount of bond required;
 - (c) The date by which bond must be posted, and;
 - (d) The terms and conditions of the permit.
 - (3) Send a copy of the approved Reclamation Plan to the local Soil and Water Conservation District.
- E. The operator shall have sixty days following the mailing of such notification in which to post the required bond.
- F. When the Department receives and approves the required performance bond, it shall issue the permit.

89-180. The Reclamation Bond.

- A. In the event a surety bond will be given to secure the obligation for reclamation, Form MR-800 will be completed.
- B. In the event cash or registered securities or a savings account assignment will be given to secure the obligation for reclamation, Form MR-900 will be completed.
- C. In the event, cash, registered securities, or a savings account assignment will be given to secure the obligation for reclamation, Form MR-1000 must also be completed. All registered securities must be assigned and registered to the State of South Carolina. Savings accounts must be issued jointly in the name of the operator and State of South Carolina.
- D. In the event an irrevocable letter of credit will be given to secure the obligation for reclamation, Form MR-1050 will be completed.
- E. The following items will be verified by the Department to determine the acceptability of a letter of credit:

⁵ Department of Highways and Public Transportation=s name was changed to S.C. Department of Transportation.

- (1) The letter of credit must be issued by a financial institution which is federally insured and must be issued or confirmed through a South Carolina institution with a minimum asset value of fifty million (\$50,000,000) dollars.
- (2) The document must be immediately payable on demand by and to the State of South Carolina in the full amount of the required bond.
- (3) The letter of credit must be accompanied by power of attorney granting the Department full power to assign, appropriate, apply or transfer the deposit or any portion thereof, for the satisfaction of any damages, assessments, late payment charges, penalties, or deficiencies arising out of any default in the performance of the terms covered by the bond.
- (4) The letter of credit must contain a clause providing that, in the absence of notice from the financial institution to the Department at least 90 days prior to the stated or any extended expiration date not to renew the credit represented by the letter of credit, the letter of credit will be automatically renewed in full force and effect for an additional one year period.
- (5) The letter of credit must authorize the Department to exercise the right to collect the full amount of credit from the financial institution in the event of either (1) a default occurring prior to the expiration date (including any extended date) or (2) failure of the operator to furnish an acceptable substitute bond at least 30 days prior to the expiration of the letter of credit if the financial institution gives proper 90 day notice of intent not to renew the letter of credit.

89-190. Requirements and Procedures for Handling Surety Bonds or Other Securities.

- A. The Department will deposit registered securities, certificates of deposit, passbooks for the assignment of a savings account with the State Treasurer's Office.
- B. Interest, rents or dividends payable on such securities or accounts shall accrue to the interest of, shall be paid to, or shall be withdrawn or collected by the operator.
- C. Prior to posting registered securities as a reclamation bond, and at least annually thereafter, the Department shall require the operator to have a Securities Analyst conduct an evaluation of the financial performance of the underlying entity.
- D. The Department will place cash deposits in an escrow account, non-interest bearing to the operator, with the State Treasurer.

89-200. Amount of Bond or Other Security.

- A. A bond or other security must be provided to cover the land to be affected by mining for a three-year period of operation plus all affected areas including sediment or tailings ponds, stock or waste piles, entrance roads and processing plants. An operator, upon prior approval by the Department, may reduce the required bond amount by reclaiming abandoned mined land.
- B. For mining operations with affected lands greater than twenty-five (25) acres, the Department may require the operator to prepare a written estimate of the cost of reclamation activities. Cost estimates prepared by the operator may be used by the Department in establishing reclamation bond amounts. The cost estimate shall reflect the customary and prevailing rate for performing and completing all reclamation requirements.

- C. In the event a mining operation with an affected area greater than twenty-five (25) acres exceeds the bonded acreage by more than ten (10) percent, the Department shall be notified in writing. Following notification, the Department shall evaluate the bonded acreage and determine the bond amount for the total affected area.
- D. In the event it is found at any time that the amount of disturbed land for which a bond or other surety has been posted is more than the bonded area, the Department may require the operator to file additional bond or surety sufficient to cover the amount of land disturbed by such operation.
- **89-210. Annual Reclamation Report.** Form MR-1100, entitled "Annual Reclamation Report", shall be completed in typewritten or hand printed form as required by the Act.
- **89-220.** Application for Modifying a Mining Permit and/or Reclamation Plan. When an operator requests modification of a mining permit and/or reclamation plan, Form MR-1300, entitled "Application for Modifying a Mining Permit and/or Reclamation Plan", shall be completed in typewritten or hand printed form and submitted to the Department.

89-230. Transfer of Operating Permit.

- A. In accordance with Section 48-20-70 of the Act, an operating permit may be transferred when one succeeds to the interest of another. An operating permit may be transferred to the successor operator when the following documents have been completed and submitted to the Department for review:
 - (1) One copy of Form MR-1400 entitled "Transfer Agreement".
 - (2) One copy of Form MR-500 entitled "Reclamation Plan".
- (3) One copy of Form MR-600 entitled "Land Entry Agreement-Owner" (if the mine operator owns the land) or one copy of Form MR-700 entitled "Land Entry Agreement -Lessor/Lessee (if the mine operator leases the land).
- B. Following review of the completed documents to transfer an operating permit and receipt of the required reclamation bond, the Department shall issue an operating permit to the successor operator.
- **89-240. Inspections by the Department.** The Department, by and through its accredited representatives, may conduct inspections and investigations of the permitted area at any reasonable time for the purposes of determining whether the operator has complied with the reclamation plan, the requirements of the Mining Act, any rules and regulations promulgated thereunder, and the terms and conditions of the Certificate of Exploration or operating permit. Prior to or at the time of such inspection or investigation, the Department's accredited representative shall notify the explorer or operator by any appropriate method that an inspection is to be conducted. The accredited representative shall comply with the regulations of the Mine Safety and Health Administration when conducting inspections pursuant to this regulation.
- **89-250.** Criteria for Determining Amount of Civil Penalty. In determining the amount of civil penalty assessment, pursuant to Section 48-20-220 of the S. C. Mining Act, the Department shall consider the following criteria insofar as they are appropriate to the violation:
 - (A) Nature of violation;
 - (B) Degree and extent of the harm, including off-site damage;

- (C) Duration of the violation;
- (D) Cause of the violation;
- (E) Cost of compliance and rectifying any harm or damage;
- (F) Violator's previous record of compliance with the Mining Act, or any rules promulgated thereunder, or any mining permit issued to the violator;
 - (G) Documented staff investigative costs consisting of salary plus expenses, exclusive of overhead;
 - (H) Effectiveness of any action taken by the operator;
 - (I) Magnitude of potential or actual gains by the operator resulting from the violation;
 - (J) Demonstration of good faith by operator.
- **89-260.** Grounds for Canceling an Application for a Permit. If the required performance bond is not filed with the Department within sixty days following the mailing of notification of approval of the applicant's application for a permit, the Department will cancel the Application for a Mining Permit including the reclamation plan, unless such delay beyond sixty days can be clearly shown to have been beyond the applicant's control.

89-270. Termination of Mining Operation.

- A. The Department may declare a mining operation or a segment of a mining operation terminated when no mineral has been excavated or extracted or overburden removed or regraded for a period of twenty-four (24) consecutive months.
- B. At the request of the operator and with the approval of the Department, an operation where no mineral or overburden has been removed for twenty-four (24) consecutive months will not be terminated if mining has not begun or if:
- (1) Best Management Practices for sediment and erosion control are installed to the extent feasible on disturbed areas.
 - (2) Drainage control structures such as culverts and ditches are properly installed and maintained.
 - (3) Vegetation is established and maintained as determined to be feasible.
- **89-280.** Hearings and Hearing Procedure for Suspension or Revocation of Mining Permits by the **Department.** All hearings before the Department involving the suspension or revocation of mining permits shall be conducted in accordance with Section 48-20-160 of the 1976 South Carolina Code of Laws and Act 176 of 1977 as amended; and, any decision of the Department shall be in writing and shall comply with the provisions of Act 176 of 1977 as amended.

89-290. Hearing Procedure for Appeals of a Decision of the Department to the South Carolina Mining Council.

A. Any applicant for a mining permit or any person who is aggrieved and is directly affected by the permit may appeal to the Mining Council from any decision or determination of the Department issuing, refusing,

modifying, suspending, revoking, or terminating an operating permit or reclamation plan, or imposing any term or condition on such permit or reclamation plan.

- B. The person taking the appeal shall within thirty days after notification of the Department's decision, give written notice to the Mining Council through its secretary that he desires to take an appeal, at the same time filing a copy of the notice with the Department. The said notice shall contain a statement describing the specific matters appealed.
- C. If more than one appeal is filed with the Mining Council within the thirty day period following the decision by the Department, then the Council may consolidate the hearing and review of the appeals by the Mining Council.
- D. At its annual meeting, the Mining Council shall establish a standing Appeals Committee to hear appeals pursuant to this Section. This Committee shall consist of the Chairman of the Mining Council and two members elected by a majority of the Council, one member being a mining industry representative and the other not being a mining industry representative as designated in the organizational composition of the Mining Council. An alternate shall be elected for each of the above Committee members following the same procedure. In the event that the Chairman is unable to serve on the Committee, the Vice-Chairman shall assume the chairmanship for the period of time necessary to address the pending appeal. Nothing herein shall preclude the election of an appeals committee member or alternate to fill a vacancy during the year at any called meeting of the Mining Council.
- E. If the person taking the appeal requests a hearing before the hearing panel, the Chairman of the Council may accept recommendations for member(s) of the hearing panel. The hearing panel may consist of one or more individuals. The Chairman of the Council shall be responsible for appointing the hearing panel which must be agreed to by the appellant(s), the Council, the operator and the Department.
- F. Hearings shall be conducted and a final decision issued by the Appeals Committee or the Hearing Panel unless the appellant specifically requests a hearing before the full Mining Council in his written notice of appeal. In this event, the full Mining Council may hear the appeal or may, by a majority vote, assign the appeal to be heard by the Appeals Committee. At any hearing conducted by the Council, a majority of the members shall constitute a quorum; at any hearing conducted by the Appeals Committee all three members shall be required for a quorum.
- G. When a hearing has been scheduled by the Mining Council, notice of the hearing shall be given to all concerned parties at least twenty (20) calendar days prior to the date on which the hearing will be held.
 - (1) The notice of a hearing shall be sent by the Chairman of the Council.
 - (2) This notice shall contain all of the following information:
 - (a) The date of the notice;
 - (b) The Council's name, address and telephone number;
- (c) A statement of the date, time, and location of the hearing;
 - (d) A statement of the legal authority and jurisdiction under which the hearing is to be held;
 - (e) A reference to the particular sections of the statutes and rules involved; and

- (f) A short statement describing the specific matters appealed.
- H. All hearings shall be conducted in accordance with the Administrative Procedures Act 176 of 1977 as amended, except as may be herein provided.
- I. The final order shall be issued by the Chairman of the Council, and the decision of the Appeals Committee, Hearing Panel or Council shall represent the view of the majority of the Appeals Committee, Hearing Panel or Council members voting at the hearing.
- J. The final order shall be written within thirty (30) days following the hearing and shall comply with the provisions of the Administrative Procedures Act 176 of 1977 as amended.

89-300. Declaratory Ruling.

- A. Any person may petition the Council for a declaratory ruling as to the applicability of any statutory provision or the content of administrative forms or of any rule or order of the South Carolina Mining Council.
- B. Such a petition shall be in written form and addressed to the Chairman of the Council.
- C. A decision on the petition shall be issued in written form within sixty days of receipt of the petition, provided that this period may be extended with the written approval of the petitioner.

89-310. Petition for Promulgation, Amendment, or Repeal of Regulations.

- A. Any interested person may petition the South Carolina Mining Council requesting the promulgation, amendment, or repeal of any regulation.
- B. This petition shall be in written form and addressed to the Chairman of the Council.
- C. Within thirty days of receipt of the petition, the Council shall either deny the petition or initiate regulation-making proceedings.
- D. In any case where the Council denies the petition, it shall do so in written form and it shall state the reasons for its denial
- E. A hearing may be initiated by any aggrieved person seeking to contest the authority of the South Carolina Mining Council to promulgate a regulation provided that a written request for such a hearing is submitted to the South Carolina Mining Council prior to final promulgation of the regulation.
- **89-320.** Notices. Whenever written notice is required to be given by the Department, such notice shall be mailed by registered or certified mail to the permanent address of the applicant or operator as set forth in his most recent application for an operating permit or for a modification or latest Annual Reclamation Report. No other notice shall be required.

89-330. Criteria for Approval of Reclamation Plan and Completed Land Reclamation.

A. Minimum standards for final slopes in all excavations in soil, sand, gravel, or other unconsolidated materials. The final slopes in all excavations in soil, sand, gravel and other unconsolidated materials shall be at such an angle as to minimize the possibility of slides and be consistent with the future use of the land and shall not be steeper than 3H:1V, unless approved by the Department.

- B. Minimum safety standards for excavations.
- (1) Provisions for safety to persons and to adjoining property must be provided in all excavations. If deemed necessary by the Department, other appropriate provisions may be required, including but not limited to, fences, guardrails, sloping, warning signs and other protective measures.
- (2) Safety to adjoining property shall be provided by adequate setback, slope angles, or other provisions as deemed necessary by the Department. If necessary to provide safety, mine operators may be required to leave a minimum undisturbed buffer zone between the mine excavation and contiguous property line or highway right-of-way, unless other safety provisions are approved by the Department.
- C. Minimum standards for the configuration of overburden and spoil banks. In open cast mining operations, all overburden and spoil shall be left in a configuration which is in accordance with accepted conservation practices and which is suitable for the proposed subsequent use of the land. Side slopes of spoil banks, peaks, ridges, and refuse shall not be steeper than 3H:1V, unless approved by the Department.
- D. Minimum standards for pools of water, streams, lakes, ponds and marshlands.
- (1) In no event shall any provision of the Act be construed to allow small pools of water that are, or are likely to become noxious, odious, or foul to collect or remain on the mined land. Lakes, ponds, wetlands or marshlands shall be considered adequately reclaimed lands when approved by the Department.
- (2) Suitable drainage ditches, conduits, or surface gradient shall be constructed to avoid collection of noxious, odious, or foul pools of water.
 - (3) Those portions of the reclamation plan involving lakes and ponds shall be approved if:
- (a) A supply of water sufficient to maintain the approximate design pool elevation in accordance with the reclamation plan is available. In all cases, a sufficient water supply shall be available to maintain a minimum water depth of four (4) feet on at least fifty (50) percent of the surface area of the lake or pond unless the lake or pond is to be used for aquaculture;
- (b) Side slopes no steeper than 3H:1V extending to the anticipated average water level except for excavations in rock or where other special considerations are approved by the Department;
- (c) Structures impounding a lake or pond conform to standards set forth in requirements promulgated under the Dams and Reservoirs Safety Act or designed by a professional engineer;
- (d) All waters shall conform to standards set forth by the South Carolina Department of Health and Environmental Control for surface waters in South Carolina. The specified standards will not be considered violated when values outside the established limits are caused by natural conditions and when no significant environmental harm would result;
- (e) Waters designated for fishing lakes shall have at least twenty (20) percent of the total surface area less than six (6) feet deep, with an average minimum depth of three (3) feet;
- (f) Water designated for use in water contact sports shall meet the following conditions: all areas within five feet of the lowest expected water level shall be cleared of all stumps, logs, and other debris, and there shall be no sudden drop offs or deep holes. A three-foot deep shelf around the shore line is permissible for control of aquatic vegetation;

- (g) Water designated to be used as waterfowl areas shall have a means of controlling the water level so that at least fifty (50) percent of the area can be either drained or flooded, unless otherwise approved by the Department;
- (h) Water areas designated for other uses, such as for aesthetics, irrigation, stock watering, aquaculture, marshlands, or wetlands, shall be considered adequately reclaimed upon approval by the Department.
- (4) Stream banks are adequately reclaimed when returned to the approximate original slope and vegetated. Such reclamation shall be done in a manner so as not to adversely affect downstream areas.
- E. Minimum standards for cropland. Slopes and the condition of the surface must be such that commonly used farm machinery can cultivate, maintain, and harvest the area safely. Conservation practices essential for controlling erosion and sediment must be established, unless waived by the Department.
- F. Minimum standards for grassland. The operator shall establish on a continuing basis the vegetative cover and soil stability appropriate to the area. Conservation practices essential for controlling both on-site and off-site erosion and siltation must be established. A minimum of seventy-five (75) percent vegetative ground cover, with no substantial bare spots, must be established and maintained into the second growing season. Where the Department finds that because of special soil conditions it is not feasible to establish a minimum of seventy-five (75) percent ground cover, it may approve a reclamation plan consistent with the original soil condition.

G. Minimum standards for woodland.

- (1) The operator shall establish on a continuing basis the vegetative cover and soil stability appropriate to the area. Conservation practices essential for controlling both on-site and off-site erosion and siltation must be established.
- (2) Areas reclaimed to woodland must be planted or seeded with respect to species selection, spacing, and ground preparation, according to the recommendations of the South Carolina Commission of Forestry or a registered forester.
- (a) Survival meeting the recommendations of the South Carolina Commission of Forestry or a registered forester with no substantial bare spots must be achieved through one full growing season;
- (b) Ground cover or other conservation practices shall be required in areas where erosion will be active until the trees or shrubs establish a ground cover from their own litter. Ground cover may be annual or perennial vegetation, or mulching. The requirement for ground cover may be omitted in sandy areas if the reclaimed area has a closed drainage system as long as temporary measures are used to prevent significant erosion and siltation within such areas.
- H. Minimum standards for managed wildlife habitat. Successful reclamation of this type requires highly specialized studies and the operator should work closely with the Department or other conservation agencies in planning and installing such a project. Approval of reclamation of this type will be considered on a case-by-case basis.
- I. Minimum standards for reclamation involving a sanitary landfill or other waste disposal. The Department will refer this type of reclamation over to the South Carolina Department of Health and Environmental Control for permitting, administration and enforcement of operational and monitoring requirements. When

the Department receives notice that the South Carolina Department of Health and Environmental Control's requirements have been met, the Department will then release all or the appropriate portion of the operator's surety bond or other security, provided that the operator has established on a continuing basis the vegetative or other ground cover necessary to control or prevent erosion, the soil stability, and the water and safety conditions, appropriate to the area as required by these regulations.

- J. Other reclamation. Mined land can be reclaimed to many other uses. The Department shall encourage and work with operators desiring to reclaim land to unconventional and innovative post-mining uses of affected lands. Such reclamation may be for recreational, developmental, educational or other uses.
- K Notwithstanding any other provision in this regulation or any other applicable regulation issued pursuant to Section 48-20-210 of the Act, the criteria for completed reclamation under an approved reclamation plan, as it pertains to any surety, shall be that criteria set forth in the regulations in effect at the time of the issuance of the mining permit and approved reclamation plan or that criteria in effect at the time of approval of any modification of the mining permit or reclamation plan provided the surety has consented hereto.

89-340. Fee Schedule.

A. In accordance with Section 48-20-100 of the S. C. Mining Act (S. C. Code of Laws, 1976, as amended), the following mining and reclamation fee schedules are established:

- (3) Mining permit substantial modification fee \$600.
- (5) Certificate of Exploration fee......\$300.
- B. In accordance with Section 48-20-120 of the S. C. Mining Act (S. C. Code of Laws, 1976, as amended), the following Annual Operating Fee has been established:
- - (2) Mining Annual Operating Fee Late Penalty \$50. per month;

89-350. Administrative Forms. Administrative forms to be used by the Department are as follows:

- A. Form MR-200 Application for a Certificate of Exploration
- B. Form MR-300 Reclamation Plan for Exploration
- C. Form MR-400 Application for a Mining Permit
- D. Form MR-500 Reclamation Plan
- E. Form MR-600 Land Entry Agreement-Owner

- F. Form MR-700 Land Entry Agreement-Lessor/Lessee
- G. Form MR-800 Reclamation Bond Form to Post a Surety Bond
- H. MR-900 Reclamation Bond Form to Post a Bond for Other Than a Surety Bond
- I. Form MR-1000 Reclamation Bond Form for Assignment
- J. Form MR-1050 Reclamation Bond Form to Post an Irrevocable Letter of Credit
- K. Form MR-1100 Annual Reclamation Report
- L. Form MR-1300 Application for Modifying a Mining Permit and/or Reclamation Plan
- M. Form MR-1400 Transfer Agreement